

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-65

WASTE DISCHARGE REQUIREMENTS FOR:

SOLA OPTICAL USA, INCORPORATED
PETALUMA
SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter Board), finds that:

1. Sola Optical USA, Incorporated, hereinafter called the discharger owns a 35 acre site in Petaluma, located at 3600 Lakeville Highway, (see Site Map, Attachment A). The discharger has been located at this facility since 1978 and produces optical lens.
2. The discharger has submitted a technical report on subsurface investigations dated July 19, 1984.
3. The site investigations found groundwater in a shallow and an intermediate aquifer polluted with volatile organic compounds. The discharger reported this pollution was the result of spillage and/or improper chemical handling and/or underground solvent tank leaks. The discharger has six 1,000 gal. underground solvent tanks. These tanks have not been excavated for leak inspection.
4. Site investigations conducted by the discharger, including 32 monitoring wells, have not fully defined the extent of groundwater pollution, the hydraulic characteristics of the two affected polluted aquifers, or the subsurface geologic characteristics.
5. The discharger is currently extracting polluted groundwater near the location of the underground tanks, thus providing limited pollution containment in the shallow aquifer. Extracted groundwater is aerated and stored in a holding tank. The discharger is also currently monitoring the groundwater in both polluted aquifers at various locations.

6. The groundwater pollution is of particular concern due to the close proximity of two of the City of Petaluma's domestic wells. The general location of these wells are shown on the Site Map, Attachment A.
7. The Petaluma River and Adobe Creek are located in close proximity to the discharger's facility (See Site Map Attachment A).
8. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for Adobe Creek, Petaluma River and San Francisco Bay. The Basin Plan also contains water quality objectives for groundwater.
9. The beneficial uses of the Petaluma River, Adobe Creek and San Francisco Bay include:
 - a. Recreation
 - b. Fish migration and habitat
 - c. Habitat and resting for waterfowl and migratory birds
 - d. Industrial water supply
 - e. Esthetic enjoyment
10. The existing and potential beneficial uses of the groundwater underlying the facility include:
 - a. Industrial process water supply
 - b. Industrial service supply
 - c. Domestic supply
 - d. Agricultural supply
11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
12. This project constitutes a minor modification to land and such activity is thereby exempt from the provisions of the California Environmental Quality Act (CEQA) in accordance with Section 15304 of the Resources Agency Guidelines.
13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that Sola Optical USA, Incorporated, Petaluma, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade the beneficial uses of the groundwaters of the State is prohibited.
2. The discharge of wastes or hazardous materials through subsurface transport to surface waters in quantities or concentrations which will degrade the beneficial uses of waters of the State is prohibited.
3. Activities associated with the subsurface investigation and cleanup which will cause further migration of the pollution is prohibited.
4. Additional migration of groundwater pollutants from the site and related off-site areas of the plume is prohibited.
5. Bypassing wastewater from the wastewater treatment or storage system to waters of the State is prohibited. If bypassing should occur, the discharger shall notify this Board's Executive Officer as soon as possible.

B. SPECIFICATIONS

1. The lateral and vertical extent of groundwater pollution shall be defined.
2. The hydrogeologic conditions in all polluted aquifers and related areas shall be defined.

C. PROVISIONS

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharger shall submit to the Board technical reports on self-monitoring work performed according to a program approved by the Board's Executive Officer.

3. In order to comply with Specification B.1 the discharger, shall comply with the following time schedule:

<u>TASK</u>	<u>COMPLIANCE DATE</u>
a. Define the extent of groundwater pollution in what is referred to as the "A" aquifer (uppermost zone, 0-20 feet).	September 1, 1985
b. Define the extent of groundwater pollution in what is referred to as the "B" aquifer (27 - 40 feet).	November 1, 1985
c. Determine if the groundwater is polluted in the uppermost consistent aquifer below the "B" aquifer (i.e., "C" aquifer, starting at approximately 48 feet).	August 1, 1985
d. If the "C" aquifer is polluted, submit a proposed monitoring plan.	September 1, 1985
4. In order to comply with Specification B.2., the discharger shall:	
a. Determine the hydraulic properties of the three water bearing zones.	
b. Determine the groundwater gradients for the three water bearing zones.	
c. Assess the influence, if any, the two City of Petaluma municipal wells in the immediate area have on the groundwater gradients in each affected aquifer zone.	

5. Based upon the findings reported under Provisions C.3. and C.4. of this Order, the discharger shall submit a technical report which will assess the adequacy of the monitoring system to determine if the aquifer system currently utilized by the City of Petaluma is or threatens to be polluted by this discharge. If the City's aquifer is not polluted, assess the need for a mechanism to serve as a warning system to detect possible future pollution. The technical report shall be submitted by September 1, 1985 and include a contingency plan for locating monitoring well(s) to serve as an early warning system.
6. The discharger shall submit bi-monthly reports on their progress towards compliance with the Provisions specified in this Order including specific actions taken and actions proposed prior to the next report. The first report is due July 1, 1985.
7. Documentation of compliance with Provisions C.3. and C.4. shall include groundwater gradient contour maps, pollution concentration contour maps, and cross-sectional geologic maps. The spacing of monitoring wells and/or borings shall be sufficiently close to reduce errors in interpretation between data points. This documentation shall be updated with each technical report submitted under Provision 6. of this Order.
8. All samples shall be analyzed by State approved laboratories using approved EPA methods for the type of analyses being performed. All laboratories shall maintain quality assurance/quality control records for Board review.
9. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:
 - a. Entry upon premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept.
 - b. Access to copy any records required to be kept under terms and conditions of this Order.

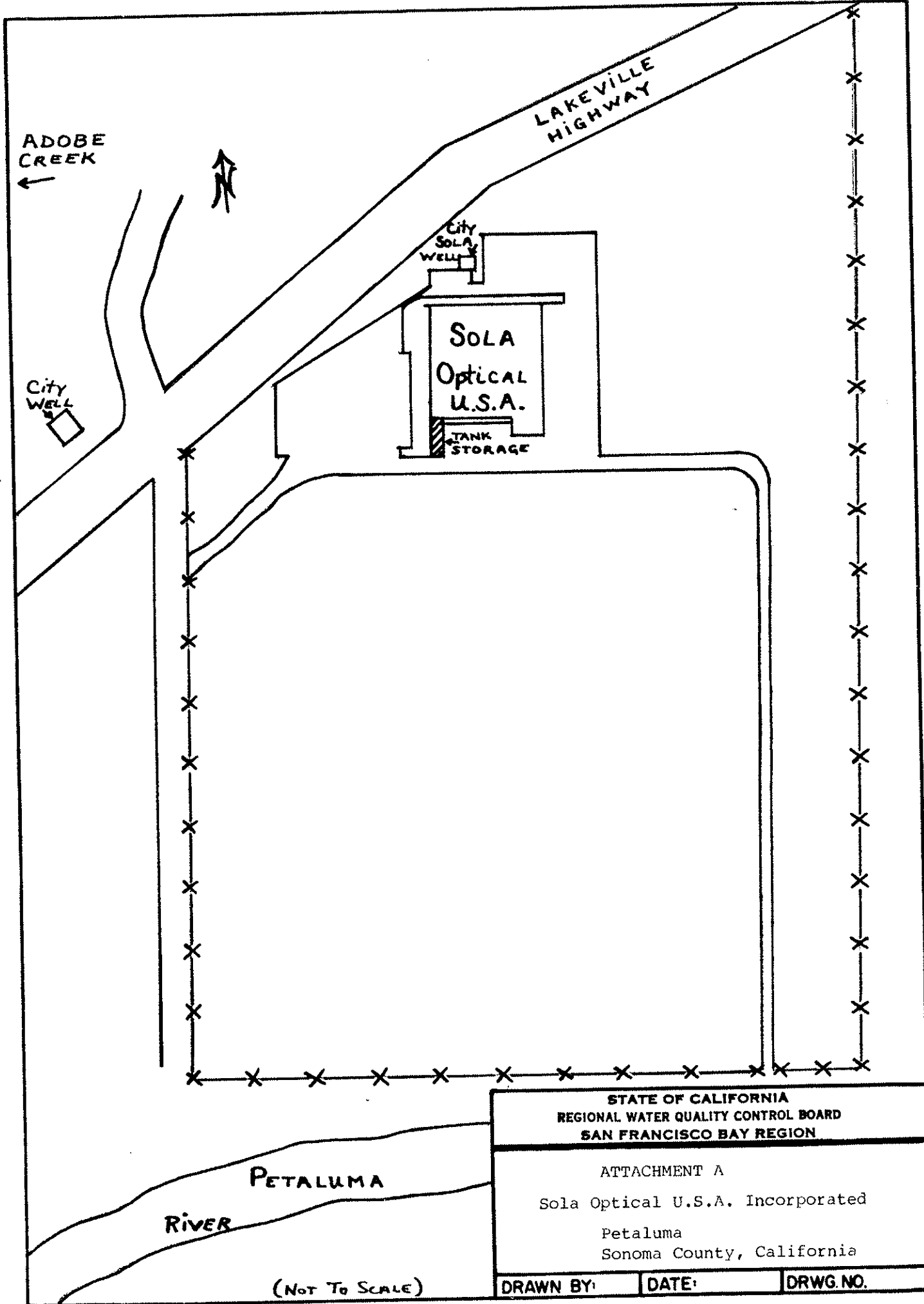
- c. Inspection of any monitoring equipment or methods required by this Order.
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible as part of any investigation or remedial action program, to the discharger.
- 10. The discharger shall maintain in good working order and operate, as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
 - 11. The discharger shall file a report on any material changes in the treatment, storage, or disposal of polluted groundwater associated with the pollution described in this Order.
 - 12. The Board will review this Order periodically and may revise the requirements when necessary.
 - 13. The discharger shall submit a technical report by July 15, 1985 which contains a determination of whether the six underground storage tanks and associated piping identified in Finding 3 are a continuing source of groundwater pollution. A scope of work for completing this task shall be submitted by June 10, 1985.
 - 14. The discharger shall submit a technical report by November 1, 1985 which determines the effectiveness of the groundwater extraction system identified in Finding 5. The technical report shall assess expansions of the interim groundwater containment system to other areas of the pollution plume.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 15, 1985.

ROGER B. JAMES
Executive Officer

Attachment:

- 1. Site Map



STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION		
ATTACHMENT A Sola Optical U.S.A. Incorporated Petaluma Sonoma County, California		
DRAWN BY:	DATE:	DRWG. NO.